

SITE-BY-SITE STORMWATER APPROACH

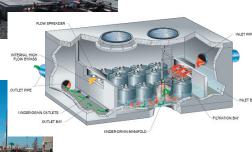
- Effective for flow control and water quality treatment, if maintained properly.
- Vault footprint is available for passive use like parking lot, lawn or under roads.
- Out-of-sight. Vault access manholes or hatches. Requires flat area without buildings or trees.
- Highest cost for construction. (Dig many holes, build large concrete boxes, cover.)
- Highest maintenance cost. (Remove sediment with Vactor trucks and ventilated man-entry. Replace filters. Requires parking lot closures or night work.)
- Private facilities for private property, public facilities for roads.
- Private property continues to generate tax revenue.
- Requires vigilant City inspection.

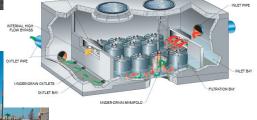
REGIONAL POND DETENTION & WATER QUALITY FACILITIES

- Most cost effective facility type for flow control and water quality treatment.
- Perimeter of pond can be trails and open space. Pond center is devoted to
- Pond located on large property dedicated to public use.
- Open water, wetlands, habitat, and vegetation for natural setting.
- Lowest construction cost. (Dig one or two enormous holes, line it, and plant vegetation.)
- Lowest maintenance cost. (Landscaping maintenance, infrequent sediment removal with excavator.)
- Publicly owned and maintained. Utility fees paid by customer's fund maintenance.
- Loss of tax revenue since property is publicly owned, though may be able to transfer some development potential.









REGIONAL VAULT DETENTION & WATER QUALITY FACILITIES

- Effective for flow control and water quality.
- Vault footprint is available for passive use like large parking lot, lawn, or public plaza.
- Vault located on large property dedicated to public use, or in partnership with private landowner.
- Out-of-sight. Vault access manholes or hatches. Requires very large flat area without buildings or trees.
- Lower construction cost compared to site-by-site vaults. (Dig a hole, build enormous concrete box, cover.)
- High maintenance cost. (Lower equipment into vault with a crane, ventilate vault, remove sediment, and replace filters. Requires parking and road closures or night work.)
- Publicly owned and maintained. Utility fees paid by customer's fund maintenance.
- Loss of tax revenue since property is publicly owned, though may be able to transfer some development potential.

INTEGRATED LOW-IMPACT DEVELOPMENT (LID) OPTIONS

- Small-scale improvements, evenly distributed, effectively complement flow control facilities.
- Improvements are integrated into development to minimize impacts
- Bioretention swales, rainwater harvesting, green roofs, rain gardens, can be incorporated into site design to enhance park or open space feel.
- The goal is an integrated design with pockets of vegetation.
- Cost for improvements is offset by reducing the size and cost of other facilities.
- Modest maintenance costs, but reduced costs for traditional
- Distributed across public and private property and maintained accordingly.



